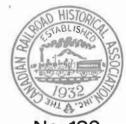
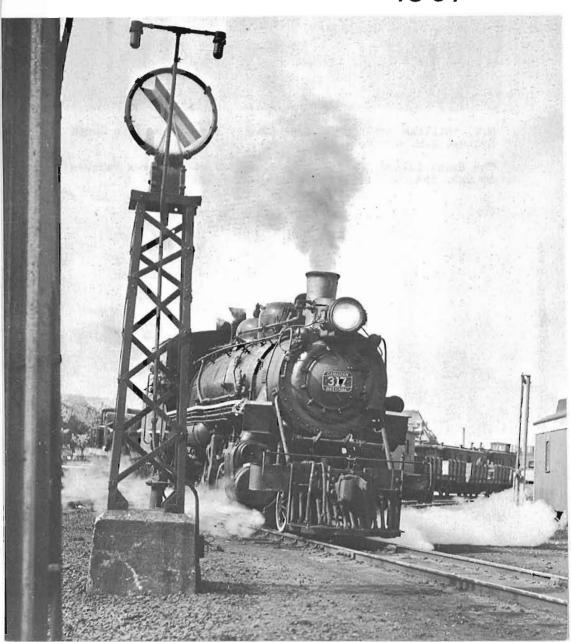
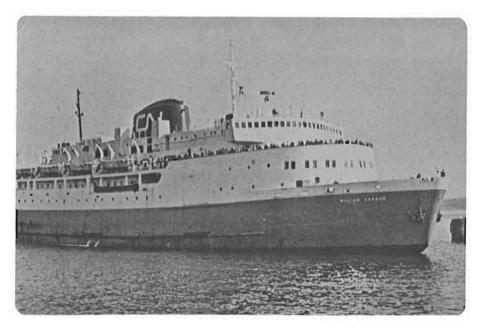
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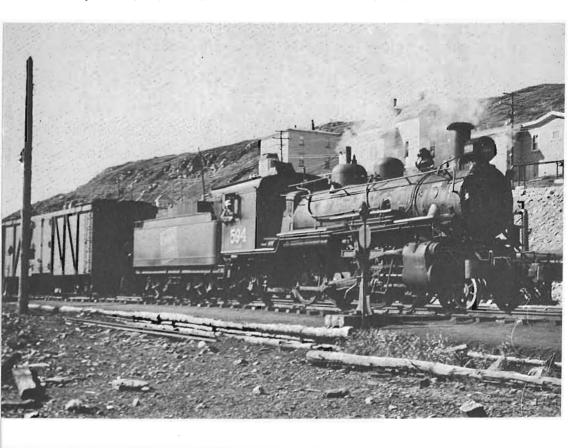
July - August 1967





M.V. "William Carson" furnishes daily service between North Sydney, N.S. and Port aux Basques, Newfoundland.

The trans-island "Caribou" is assembled at Port aux Basques by C.N. 594, the port switcher on June 19, 1956.



NARROW GAUGE

(away out east)

- by Tiv Wilkins -

Only one of the Canadian Fathers of Confederation was alive and well enough on July 1, 1967, to celebrate the Centennial of Confederation. The Father's name is, of course, the Honourable Joey Smallwood, Premier of the Province of Nswfoundland ever since he brought the province into confederation with Canada in the Spring of 1949. We feel it appropriate that this issue of Canadian Rail contain the following in-depth description of travel to and on the unique and fascinating railroad which Canadian National Railways inherited when Canada's youngest province joined the family. This article is all the more timely in that CN has recently made known its intention of removing the narrow-gauge passenger trains in favour of standard gauge buses to operate over the recently-opened Trans-Canada highway. We feel sure that this narrative will entice many to ride these trains while there is still time.

here still remains a narrow gauge train in North America, operated around the calendar for regular passenger traffic. It's a name train, too --"The Caribou"-- which runs over Canadian National Railways' 3'6" gauge main line across the island of Newfoundland.

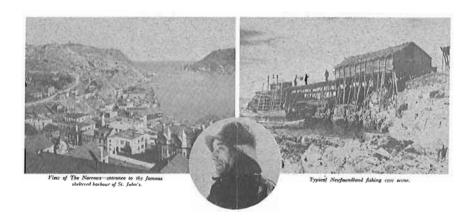
With an impressive consist of sleepers, diner, club car, day coaches and head-end cars, No. 1 departs westbound from St. John's every day except Thursday from mid-June to mid-September% and No. 2 eastbound leaves Port aux Basques every day except Tuesday%. During the rest of the year departures are reduced to Monday-Wednesday-Friday from each end of the line. Although the two terminals are only 300 miles apart via the crows' flight, the rails connecting them wind over a circuitous route of 548 miles through a country of lakes, rivers, mountains and forests. Scheduled running time is 21 hours for the eastbound trip and 22½ hours westbound. However, the average 25-mile-per-hour schedule for the entire trip is not indicative of the speed of the train. Between numerous stops and layovers at division points, the train runs at a rather fast clip, even on some of the sharp curves.

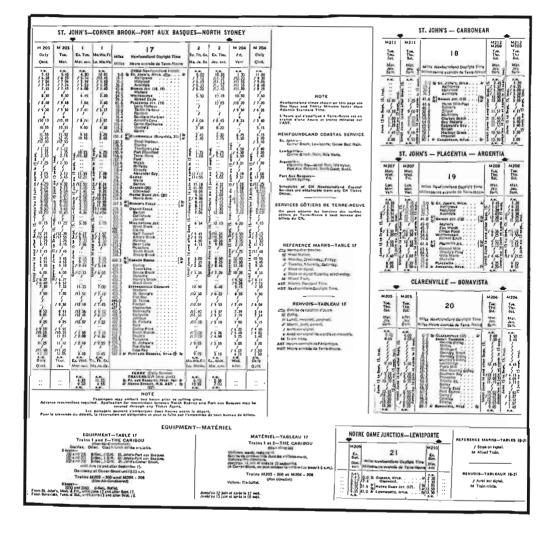
Newfoundland - Canada's most easterly province - lies 90 miles across Cabot Strait from the northeastern tip of Nova Scotia. Daily ferry service is provided by the Canadian National Railways between North Sydney, N.S. and Port aux Basques, Nfld.; ferry schedules are coordinated with the arrival and departure of trains on both the Nova Scotia and Newfoundland sides of the strait. Scheduled crossing time is six hours.

It was a foggy day in late July 1964 when my wife and I boarded the ferry "William Carson" at North Sydney. The overnight train from the south had arrived an hour behind schedule which

- * See schedules following page.
- & Now 101 & 102 daily on different schedule.

Cover: C.N. 317 backs onto the head end of the "Caribou" at St. John's Newfoundland, June 20, 1956.





necessitated a quick transfer from the train to the boat. Departure time was 7:00 A.M. but because of the delayed arrival of the train it was past eight o'clock when the boat pulled away from the dock.

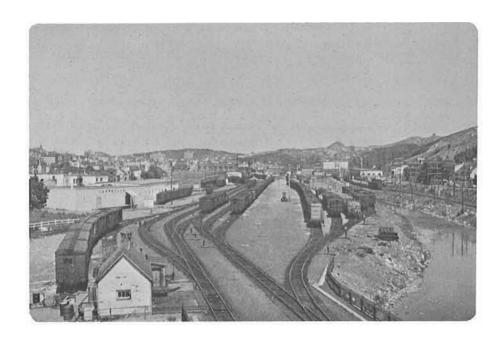
Once settled aboard the ferry we proceeded to the spacious and attractive cafeteria. With a seating capacity of nearly 150 people, it was possible to have a leisurely breakfast, which was greatly appreciated after the rush from the depot in a crowded taxi, working our way to the reservation window at the Port Ticket Office and hurrying up the long flight of steps to the boat, lugging our own baggage.

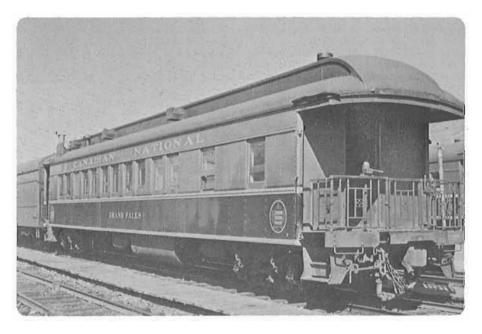
After breakfast we took a self conducted tour of the "William Carson". Trim and neat throughout its entire length of 351 feet, this modern streamlined vessel has a displacement of 7550 tons and is capable of a maximum speed of 16 knots. However, due to the rather heavy fog, we were travelling somewhat slower than the maximum. About 300 passengers can be accommodated on two decks with space below for 50-60 automobiles and trucks. There is additional cargo space astern the passenger decks. In addition to the cafeteria, passenger facilities include three comfortable, well-appointed lounges with individual reclining seats, a number of two and four berth cabins and a few twin-bed deluxe cabins with private bath. Except during the summer months the northbound crossing is at night, hence the sleeping accommodations. Several of the cabins were occupied on our seiling, mostly by families with small children.

With different gauge railroad connections at the two ferry terminals no railway cars are ferried across the strait as is done on Northumberland Strait between New Brunswick and Prince Edward Island. (Some standard gauge track has recently been laid at Port aux Basques to enable direct trans-shipment from the Newfoundland narrow gauge freight equipment to standard gauge cars which will be ferried over the Cabot Strait.) Trans-shipment of freight between the mainland and Newfoundland is made from railway car to ferry at each end of the crossing, then back to railway car on the opposite shore. A new ferry which is to go into service across the strait in 1967 will result in a significant reduction in the transfer handling of freight. Now being built, it is to have sufficient standard gauge trackage to carry 35 to 40 railway cars plus space for a number of trailer trucks. Transfer of freight to and from the standard gauge cars will be made at Port aux Basques.

Our voyage across the strait was uneventful, although never boring. The weather was calm but it became more "soupy" toward the middle of the strait. We were behind schedule but there was no need for concern, because we knew the train would wait for us. After all, nearly all its passengers were on the ferry. With all the comforts aboard and the opportunity to converse with other passengers, the crossing time seemed much shorter than the $6\frac{1}{2}$ hours which elapsed.

As we approached Newfoundland the fog became less dense and we were able to see the rocky coastline when we were perhaps a mile away. Soon the buildings on shore became visible and as we made our way through the harbour we got the first glimpse of our train standing at the station adjacent to the dock. That was our objective - - - the train we had travelled so far to ride!





Railway yards at St. John's looking towards depot and harbour. Open-platform sleeper "Grand Falls" in yards at St. John's. Upper: Lower:

CN 314 -- narrow gauge Mikado -- and diesel #904, during the change-over period between steam and diesel power in Newfoundland. Page 159 - Upper:

A GMD 875 hp unit in yards at St. Johns. This is Lower:

one of the engines used for switching and branch line service.

Arrival at Port aux Basques was approximately 2:30 P.M., Atlantic Standard Time. But Newfoundland is in another time zone one-half hour ahead of Atlantic time. Also, all trains in the Province operate on Daylight Saving Time during the summer months. so we set our watches ahead one-hour-thirty-minutes to correspond with Newfoundland Time.

Transfer from the boat to the train required only a few minutes -- and this time we had help with our baggage. A forty minute interval before departure allowed some time to look at the equipment. I was surprised at the number of coaches and train's sleek appearance. Except for the diminutive size of cars, its exterior compared favorably with that of some of the top trains we had ridden on the mainland. The consist at that point included four sleepers, five coaches, a diner and two head end cars, powered by two 1200 HP GMD's with a steam generator behind the second engine. We were later to witness a pick-up of a second diner which doubled as a club car a few miles out of Port aux Basques, and the addition of two more sleepers at a major stop late that evening. Although the cars appear to be of fairly recent vintage, they are all of heavyweight construction. That was understandable after a few hours ride over the track!

The sleeping cars have eight sections and one drawing room, four sections fewer than standard gauge sleepers of comparable design on CNR mainland lines. The berths appear to be of standard length although a little narrower than on standard gauge cars. The train is not air-conditioned -- it is not needed! The windows are screened and equipped with a shutter device which permits regulation of outside air coming into the berth, a familiar arrangement to those of us who rode sleepers before the advent of air-conditioned trains. The sleeping cars are all named, just as their big brothers on the mainland. Names of Newfoundland towns have been adopted -- "Bona Vista", "Twillingate", "Grand Falls", "Burgeo", to name a few, although at least one is named for one of the Island's principal rivers, the "Humber".

The coaches have a seating capacity of 48 to 52 passengers. The seats are about as wide as on standard gauge coaches but the aisles are narrower. The interiors are attractive and are well maintained. The diners seat 24 and are serviced by three waiters and two cooks. The cooks' galley is very small with much of the space taken up by a large coal stove. The food and service for each of the six meals we ate on the round trip were excellent. Meals are complimentary for sleeping car passengers.

The train was virtually full when we left Port aux Basques. Probably 85 percent of the passengers were Newfoundlanders returning home from vacation or business trips. Several others were native to the Island but had moved away and were returning to their homeland to visit. One party of United States Navy personnel and their families were going to the U.S. Naval base at Argentia. There was a very small sprinkling of sightseeing tourists, among whom was another "rail-fan" couple from Massachusetts. They had ridden trains in many parts of the world purely for pleasure and experience but this was their first trip to Newfoundland.

An air of friendliness prevailed throughout the trip. Newfoundlanders are congenial people and are anxious to be good Then too, the compactness of the train was conducive to

fellowship and conversation. Several of the passengers with whom I talked had ridden this train so many times that it was far from a novel experience for them. They could not understand why anyone would come to Newfoundland just to ride what they satirically referred to as the "Newfy Bullet". But of course they were not "rail fans".

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For the first few miles out of Port aux Basques the train travels in a northwesterly direction, winding through an area of barren rocky land, across an occasional patch of muskeg or a small lake, then along the shore of the Gulf of St. Lawrence. At times the track is at the water's edge but usually a short distance away. It soon leaves the coastline and gradually swings toward the northeast, the general direction in which it will wind for the next 150 miles. A range of rugged mountains came into view to our right, rising abruptly from the lake and tundra dotted land through which we were passing. It was the southern end of the Long Range, which reaches an altitude of 1700 feet at that point. Between the clusters of clouds hovering around the summit, patches of snow were visible on some of the slopes.

About an hour after the start of our trip we stopped at St. Andrew's, a small hamlet situated on an estuary where the Little Codroy River empties into the Gulf. Here the track crosses the river and enters a quiet little valley with a scattering of colorful houses - a striking contrast to the area we had just left. A stop was made to pick up the diner-club car which had been left on a siding by Train No. 1 on its way to Port aux Basques earlier in the day. After a few miles the little Codroy River disappeared into the scrub timber and hills to our right. The valley widened and we soon came to the Grand Codroy River, an impressive stream said to be teeming with salmon. It is a separate river with no connection with the Little Codroy. The track follows the Grand Codroy for some 20 miles, occasionally running along the edge of its steep, rocky banks.

The terrain becomes quite rough as the train progresses northward, winding around wooded hills and ravines and across small, swift streams. Since leaving Port aux Basques the weather had been as diverse as the character of the land, changing from foggy to cloudy, from drizzle to rain. Now the late afternoon sun was shining through the broken clouds which intensified the surrounding scenery.

Brief stops were made at St. Fintan's and Cartyville, then through more woods, across several large streams spanned by sturdy bridges and on to St. George's, a small picturesque village lying along the shore of a large bay by the same name. Not far from the village we passed under a big overhead tram which carries ore from a distant mine to the ocean steamers which dock here. A few miles farther we came to Stephenville Crossing where the track crosses a long steel bridge at the mouth of St. George's River.

Now it was getting dark and we no longer were able to look at the scenery. But after an hour of relatively smooth riding we realized we were again in hill country. Long before this we had been aware of the degree and tilt of the curves and the undulating track for which the railroad is noted, but with the outside darkness it was much more noticeable now, especially sitting in the diner or walking in the aisles. We could hear an occasional screech of the

flanges as the cars tilted first toward one side, then the other, in negotiating what seemed like sudden turns. At times the train would slow down to a snail's pace as it climbed a grade, then it would go "likity split" down the other side as though the engineer was getting speed for the next hill. On a few occasions it approached the thrill one might expect on a giant roller coaster!

Somewhere along this part of the line the train switched onto a siding where it stood for about 30 minutes. There were no lights to indicate a town or station, so out of curiosity I went to the vestibule to learn the cause of the delay. A trainman informed me we were waiting for a southbound train. As it passed I saw it was a mixed train with a couple of varnish coaches, a few freight cars and a caboose. I did not inquire why it took precedent over the line's crack train. It was apparently by direction, certainly not by Class.

It was not long after our meet with the mixed train that the lights of Corner Brook came into view. This was to be a major stop which I had been anticipating. We descended the hills to the edge of Humber Arm of the Bay of Islands, turned eastward, passed through several small settlements, then around a wide curve to the Corner Brook depot. As we pulled into the railroad yards a large industrial plant was seen to the left of the train. The lighted buildings and the mass of steam emerging from the stacks indicated a night shift operation. I learned that it is one of the largest integrated paper mills in the world, a facility of Bowater Pulp and Paper Company which is a dominant factor in the economy of Newfoundland.

Corner Brook is the second largest city in the Province with a population of around 25,000. It is a division point for the railroad and the location of railway shops. (Humbermouth). Thirty minutes were spent here changing crews and servicing the cars. Two sleepers were coupled to the end of our train, one with an open rear platform. At the time I thought the open platform would be an ideal place from which to take photographs of the train and scenery, but later experience was to prove the falacy of my thinking.

Upon leaving Corner Brook we were to follow the Humber River for 35 miles to the little village of Deer Lake. There the track starts an easterly course. Another 16 miles it crosses the northern end of Grand Lake, then begins a climb into a mountainous area. We were passing through some of the most spectacular scenery on the entire trip but because of darkness we would have to wait for the return trip to see it. On a short jog to the south the train reaches the highest point on the line, an elevation of 1500 feet. After turning easterly again it descends from the high country to the Exploits River, follows the river through Bishop's Falls which is the second Division point, then over the Gander and on to the eastern part of the island. There the line runs southward for about 120 miles to Placentia Junction; thence a final easterly course to St. John's. None of these courses are straight - the track is ever winding, avoiding hills, lakes, patches of muskeg and saltwater inlets.

After several hours of riding over the track I wondered how soundly I would be able to sleep in my lower berth. However, much to my satisfaction, I slept quite well. I was awakened only twice, once by smoke from the heated brakes entering the open win-

dow, which was easily corrected by adjusting the vent; another time there was a jerking and swaying motion as we evidently were winding through some rough country, but that didn't last long and I was soon back to sleep.

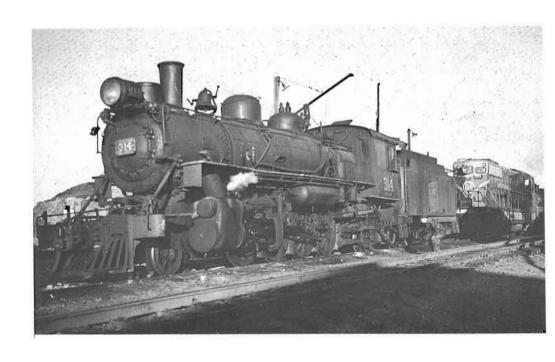
When I awoke the next morning, we were at Clarenville which is situated in an arm of Trinity Bay. It is a division point on the main line and also the starting point of a branch which runs to Bonavista, 89 miles northeast near the tip of the peninsula between Bonavista and Trinity Bays. From Clarenville the main line continues south, first through upland country, then along the Come-By-Chance river to where it flows into a small cove on Placentia Bay, and finally on an isthmus connecting the main body of the Island with Avalon Peninsula. Just before noon we passed Placentia Junction where a branch takes off to Placentia and Argentia, 20 miles to the southwest. The junction is a rather isolated spot in an area of small lakes with only one small trackside structure and a few houses. The train did not stop at the junction but continued on seven miles to Whitbourne where the passengers who were going to Argentia left the train.

Fourteen miles east of Whitbourne is Brigus Junction where another branch runs north 42 miles to Carbonear, on the western shore of Conception Bay. After passing that junction the train winds down a gradual grade, makes a big loop around a cove at the southern end of Conception Bay, stops briefly at Holyrood, a picturesque little resort village built around the cove, then down to the edge of the bay and along the shore. The scenery here is strikingly different from that through which we had just passed -- with the big expanse of water, the gravelly beach, the fishing boats and the quaint little homes and vacation cottages around every inlet. Part of the track is built on a rock fill at the water's edge. Bell Island, where, for many years, iron ore was mined from under the Atlantic Ocean, was clearly visible some distance off shore.

After several miles of this interesting scenery, we turned inland and started across the narrow peninsula between Conception Bay and the Atlantic Ocean. We were now approaching our destination. Our train wound across an upland area and soon came to the Waterford River, a small, swift stream which we followed the last few miles into St. John's. We had completed 548 miles of narrow gauge adventure and had arrived at the most easterly rail point in North America. We were a thousand miles farther east than New York City and 2450 rail (and ferry) miles from St.Louis, Missouri, our starting point four days earlier.

St. John's, the capital of Newfoundland, immediately captures one's fascination. It is said to be the oldest city in North America, steeped with four centuries of history and romance. Situated on rolling hills, it overlooks a beautiful, elongated harbour with a narrow opening bordered by steep, jagged cliffs. The city retains much of the flavor of its past, yet there are new developments which reflect a determined effort toward modernization. We spent four delightful days in this quaint and colourful city of 90,000 people, looking at the sights, visiting the historical places and, of course, train watching.

While at St. John's I gathered a few interesting facts on the history of the railroad. It had its beginning in 1875 when the





government of that time authorized a survey of a possible route from St. John's to the western side of the Island. Although the survey showed that a trans-island railroad was feasible, no action was taken until 1880 when a committee of the legislature recommended that a railroad be built. Construction was started the next year by a company chartered by the government. I found nothing in my limited research to indicate why the 3'6" gauge was selected but it probably can be attributed to the fact that it was a traditional measurement used in British Empire countries.

The first authorization called for a line from St. John's to Hall's Bay, an inlet on the western side of Notre Dame Bay on the northern coast of the Island, with a branch to Harbour Grace on Conception Bay. The original construction company failed after building only sixty miles of track but the shareholders took over and completed the road to Harbour Grace in late 1884. The last spike was driven by the late King George V of England, who at the time was Crown Prince. In 1886 construction was started on the extension from Whitbourne to Placentia. After some financial difficulties it was completed by the government in 1888.

After the costly experience on the line to Placentia the government decided to contract all future railroad building to private construction companies. In 1890 one Robert G. Reid, who was to play a leading role in the future of the Newfoundland Railway, entered the picture.* Reid was awarded a contract to build from Whitbourne to Hall's Bay. However, during construction it was decided to by-pass Hall's bay and to build on to Port aux Basques. The line was completed to that point in 1897. The first through train left St. John's June 29, 1898, making the run to Port aux Basques in 27 hours-45 minutes, an outstanding accomplishment considering the time in history, the type of equipment, and the character of the country over which the road was built.

With the completion of the main line attention was turned to the branches. After dropping the plan to build to Hall's Bay, access to Notre Dame Bay was achieved by constructing a branch off the main line at Notre Dame Junction, between Gander and Bishop's Falls, north to Lewisporte. The line to Harbour Grace was extended to Carbonear in 1898 and the Bonewista branch was completed in 1911. Several other branches were planned, some of which were built and later abandoned. A line from St. John's to Trepassey on the south coast of the Island was completed in 1914 but has since been removed. Probably the most ambitious plan was for a branch to extend southwesterly from a point on the main line just south of Clarenville to Fortune near the tip of Burin Peninsula. Construction was started on the proposed branch in 1915, but after completing 43 miles of track the project was discontinued and the completed section was removed. In 1914-15 the Carbonear Branch was extended to Grates, on the northern tip of the peninsula, but that section of track was abandoned in the early 1930's. Another branch, now abandoned, ran northward from Whitbourne to Heart's Content on the opposite side of the peninsula from Carbonear.

* Robert G. Reid (later Sir), of Montreal, was an experienced railroad contractor who had successfully completed a number of railroad contracts in Canada.

In 1893, while the main line was still under construction. Reid was given a contract to operate the railroad for ten years. Five years later the contract was amended to allow him to operate it for fifty years with a provision that it would become the property of the Reid company at the end of that period. Reid was to receive large grants of land in return for operating the road, in addition to grants he had previously received from construction contracts. That agreement was later modified to give the government the option of buying the railroad back at the termination of the contract. It was operated under the name of Reid-Newfoundland Company until 1923. By that time the company had met some financial reverses and had appealed to the government for help. Following a long dispute the company relinquished all railway rights to the government in exchange for a payment of two million dollars. In 1926 an act was passed changing the name to "Newfoundland Railway" and providing for a permanent organizational structure.

On March 31, 1949 Newfoundland became the tenth Canadian province. It was then that the railroad was taken over by Canadian National Railways and an improvement program started. Steam power was gradually replaced by diesels, first on the freights, then on the passenger trains. The power now in operation consists of 47 GMD 1200 hp road engines numbered from 900 to 946. six 875 hp GMD's numbered in the 800 series and three 380 hp GE shuttle engines with 775 series of numbers. There are presently \$ 94 passenger and head-end cars, including 17 sleepers and four diners. Freight cars I was informed by an official of of all types number 2190. line that no more narrow gauge passenger equipment will be acquired but that any necessary replacements will be made by altering standard gauge cars. Curves have been straightened, the track has been raised in places and 90 pound rails have replaced the 70 pound rails on the main line.

Headquarters for the administrative and technical departments is at St. John's. The yards are quite extensive, located at the upper end of the harbour with rail-to-ship transfer facilities. A modern dry dock is also operated by CNR at this point. The older buildings are of stone, including the three story depot with offices on the upper floors, and the large shop building nearby. Other buildings are of more recent design. Smaller yards and service facilities are located at Clarenville, Bishop's Falls and Corner Brook (Humbermouth) which are all division points on the railroad. Today there are 705 miles of track on the main line and the four branches, exclusive of yards, sidings and short spurs.

Although the name of the railroad has been changed and the rolling stock carries CNR identification, at least one vestige of the former ownership still remains. On the building housing the shops at St. John's is a prominent sign above the track entrance which reads "Newfoundland Railway".

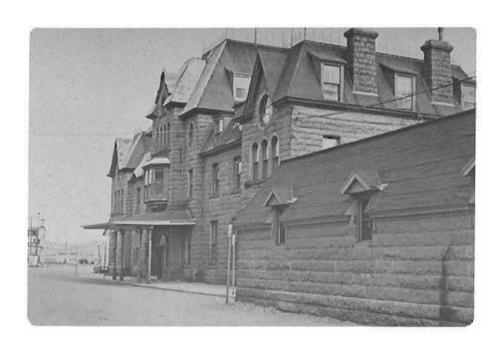
The Caribou is the only all-passenger train in Newfound-land, but additional passenger service is available on several

★ (1965)

Page 162.

Upper: CN depot and offices at St. John's.

Lower: Two ancient wooden coaches used on Newfoundland lines in days gone by. The left-hand coach was still in "Newfoundland Railway" colours in 1956.





mixed trains. One of these operates over the main line between St. John's and Port aux Basques with a weekly round trip. Both the Carbonear and Placentia-Argentia branches have tri-weekly mixed train service between St. John's and their respective terminals. Another mixed train makes a tri-weekly round trip over the Claren-ville-Bonavista branch.

CNR also operates eight steamship lines in addition to the ferry service from North Sydney. From late spring to mid-autumn regularly scheduled freight-passenger boats serve towns and villages around the perimeter of the Island and along the east coast of Labrador. For many of the ports-of-call this service is their only means of public transportation. A combination trip between St. John's and Corner Brook, going one way by train and the other by boat, is offered but accommodations are limited and reservations must be made a long time in advance.

In addition to the CNR lines there are two short narrow gauge railroads in Newfoundland. The Grand Falls Central Railway is a 23 mile line between Grand Falls and Botwood, a port on an arm of Notre Dame Bay. The Buchans Railway connects with CNR at Millertown Junction which is 34 miles west of Grand Falls. From there it runs southwesterly 40 miles to an interior mining community. There is also a standard gauge railroad in the Province - the Quebec North Shore and Labrador Railway which crosses Labrador in a remote area at its extreme western end. The road connects Sept Isles, on the north shore of the Gulf of St. Lawrence, and Shefferville, Quebec, which is just across the border of the northwest corner of Labrador. Labrador is a political division of the Province although it is on the Canadian mainland with no land connections with the Island of Newfoundland.

Leaving St. John's on our return trip across the Island, the train had two more sleepers in its consist than when we started from the other end of the line. It was not as fully loaded as it was at the start of our eastward trip but the vacant spaces were gradually filled that evening and during the night, as passengers boarded along the way. Most of our fellow passengers were leaving on vacation so they were more enthusiastic over the prospects of their ride across the Island on the "Newfy Bullet" than were some of their homeward-bound counterparts we met on our trip over. From conversations I learned that some of the passengers had shipped their automobiles ahead to North Sydney where they would pick them up, rather than risk possible damage and delay on Newfoundland's inadequate roads.

With a 4:30 P.M. departure there were still several hours of daylight at that latitude. The route to Conception Bay and along its shore, around the big loop at Holyrood and over the hills to Brigus Junction and beyond was the same we had traversed on our eastward trip. However, with a different perspective the scenery was just as fascinating as it was four days earlier. In my desire to find the best place aboard from which to photograph the moving train and some of the trackside structures, I went to the open platform at the rear of the train. But with the variable speed and the lurching and swaying I soon abandoned that spot and moved to the other end of the car. Here I could lean from the open upper half of the Dutch-style doors with much more confidence.

The next morning we were privileged to see some of the scenery we had missed on our eastbound trip because of darkness. At daylight we were winding through a wilderness-like area with a scattering of scrub timber, an occasional stream, and here and there a small pond. It was here that my wife and others on the side of the train opposite my berth saw moose browsing in the low brush, apparently unconcerned with the passing train. While at breakfast we crossed the northern end of Grand Lake on a wide dam which was constructed many years ago as part of a system supplying electricity to the Corner Brook area. Grand Lake, the largest of Newfoundland's countless lakes, extends approximately 55 miles southwest from the point where we crossed.

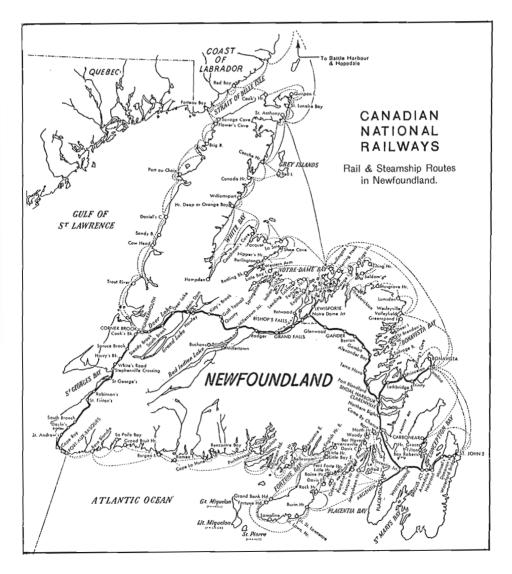
In another hour we came to Deer Lake* which is created by a dam across the Humber River. For the next 20 miles the track runs parallel to the lake which, as evidenced by the numerous cottages and well kept campgrounds, is a popular recreation area. Along this stretch of track we passed Bowater Park with its extensive camping facilities. Here, close to the track, stood an old Pacific type steam locomotive - Number 593 - retired from service but spared from the torch to serve as a monument to another era.

Below the dam the valley narrows and is hemmed in by precipitous cliffs of varied colours. As we wound along the edge of the cliffs with the Humber River below, I was reminded of similar places in the Rocky Mountains. The Humber river is only 70 miles in length but it gathers a tremendous volume of water in that short distance.

Suddenly we emerged from the canyon just above the confluence of the river and the Humber Arm of the Bay of Islands. We passed the Humbermouth railway yard and in a few minutes were at the Corner Brook station. During the 30-minute scheduled stop I did some exploring around the station yards. The rear sleeper was removed from our train and I noticed one of the head-end cars had been dropped from the consist during the night. A small diesel switcher, which at the distance appeared to be about a 25-ton - 250 hp unit was shuttling cars in the yards of the pulp and paper plant. It apparently belongs to the paper company, as it carries the identification "Bowaters No. 4". On a track adjacent to our train stood a string of 40-foot flat cars loaded with new automobiles. Each car carried two vehicles which were held fast by an ingenious rigging of small logs around the front wheels. What a contrast to the long tri-level racks used on standard gauge roads which carry up to 15 automobiles!

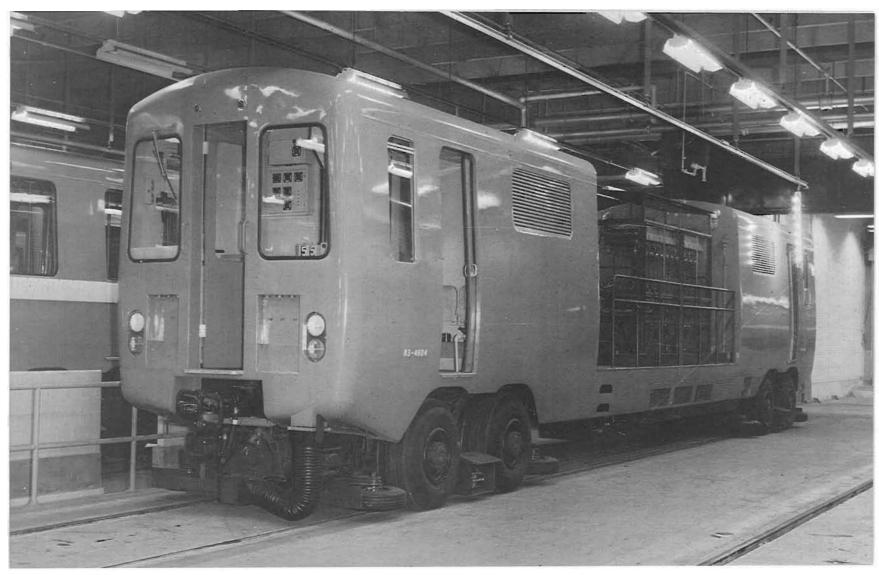
It was mid-morning when we left the Corner Brook depot. We passed the paper plant, swung west and ran through the neighbouring villages which are strung along the bay, then turned south into the hills. Much of the remaining six hours of the trip was through familiar territory. I spent considerable time in the rear vestibule observing the winding track, the big, sturdy bridges and the little hamlets isolated in the wilderness-like country. Recent track improvements were evident at several places along the line. Also, at intervals, crews of workmen with heavy equipment were seen constructing new roads or improving existing ones. It was part of an extensive highway improvement program in progress all across

* Deer Lake is also the name of a station on the railroad located at the upper end of the lake, mentioned previously.



Newfoundland. Although there are good roads near the principal towns, the lack of a continuous improved highway makes travel across the Island a hazardous undertaking. In fact, road maps and tourist brochures carry warnings of the difficulties of trans-island auto travel. But that is to be corrected by the program now underway. A first class highway between Port aux Basques and St. John's, with a network of connecting secondary roads, was expected to be finished by 1966. I could not help but wonder how "The Caribou" would be affected by the improved highway system. Was the last stronghold of complete narrow gauge passenger service in North America soon to pass into oblivion? (Recent news items suggest just that - Ed.)

After we came out of the Codroy Valley and sighted the Gulf of St. Lawrence I realized we were near the end of our journey. It had been a gratifying trip - not just another train ride, but a memorable experience. I had acquired a deep respect for the little narrow gauge train and the area it serves. It is not a revived ghost, operated solely as a tourist attraction, but instead is a full-fledged train which performs a needful service.



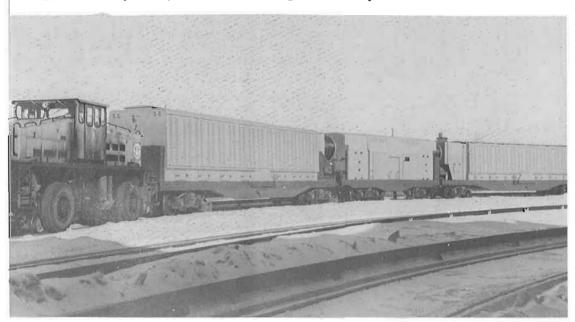
Montreal Metro Vacuum Cleaning Train

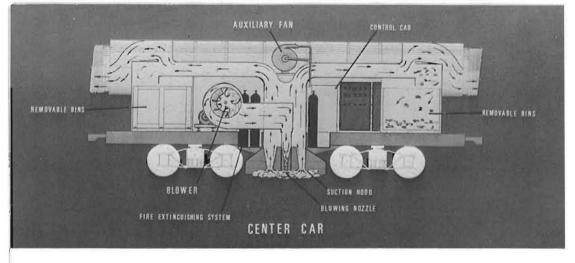
R.M. Binns

The problem of keeping subway tunnels clean is difficult, but none the less extremely important from the viewpoint of fire hazard, visibility and the proper functioning of signals and other electrical devices. While the Montreal Métro is inherently a clean subway inasmuch as there is no stone ballast, and the braking system does not produce iron dust, there is bound to be some outside dust introduced through the ventilating system and through the stations, as well as paper and other debris sucked into the tunnels by the movement of the trains. Also, there will probably always be a certain amount of cement dust, sand and concrete scale dislodged from the tunnel structure. Because of the three sets of rails required for the pneumatic tire traction system, hand sweeping or washing of the tunnel floor is economically out of the question. Consequently, a vacuum-cleaning apparatus was designed by Montreal Transportation Commission and Paris engineers and incorporated into a specially-built train. Operation of the vacuum-cleaning train is naturally restricted to a few hours at night when passenger service is suspended; consequently the public never sees it in operation. Readers of Canadian Rail might be interested in a brief description of this recent addition to the Métro rolling stock.

Basically, the train is patterned after similar equipment used in Stockholm, Paris and New York subways. However, because of the configuration of the trackwork and other requirements on the Montreal system, a new design had to be developed and built at a cost of \$300,000. It is comprised of three units, - a centre car containing most of the suction components and two end cars which contain the suction fans and filtering equipment.

Below: M.T.C.'s Vacuum Cleaning Train.
Opposite: 83-4604, one of the two pneumatic-tyred electric work cars.





In principle, the cleaning operation is relatively simple, and is achieved by blowing air at high velocity over the road-bed and then capturing the dust-laden air with large suction hoods under the centre car. The centre car also houses a control cab where the operator stands when the train is in operation.

Referring to the illustration of the centre car, (Figure 1) the location of the blower fan will be seen. This is a centrifugal, airfoil type, driven by a 40 H.P. d.c. shunt motor. It expels 7,000 cubic feet per minute through a nozzle directly under the centre of the car. The nozzle is a slot 5/8" wide and 91 inches long. Air speed at the nozzle is 15,000 ft. per minute.

Suction hoods, 7 inches x 91 inches, are placed on each side of the nozzle, and the dust-laden air is pulled through to the end cars by suction fans. These fans have an output of over 40,000 c.f.m. at 14 inches static pressure. Each suction fan is driven by a standard subway-car traction motor rated at 150 H.P. on continuous operation.

Before passing into the end cars, the air first reaches settling chambers, where, because of a reduction of velocity and a sharp change of direction, the coarser and heavier debris drops out and settles in removable trash boxes. Flexible ducts then carry the air into the end cars and through the filters. The filters consist of especially woven dacron bags 5 x 8 inches (oval) and 65 inches long. About 1,000 of these bags are suspended from frames in the roofs of the end cars. The air is pushed up through the filter bags from which it escapes through louvered doors on the sides of the cars. (Figure 2).

When the train is returned to the shops, the frames from which the filter bags are suspended, are shaken by a vibrator mechanism and the fine flour-like dust falls from the bags to the bottom of the chamber. The material is then pulled by a scraper mechanism to the centre of the car where it empties into a transverse worm screw chamber. This is a simple device for moving the dirt transversally to a discharge port on either side of the cars. Since the screw can be reversed, it is possible to unload from either side, into containers.

The dust and dirt extracted is extraordinarily fine, - in the order of 5 to 25 microns, - mostly the product of construction, but also appreciable quantities of lint are found, which is to be expected from an environment in which great numbers of people are moving.

An auxiliary suction fan is installed at the top of the centre car for cleaning areas out of reach of the main fixed suction hoods. The latter operation is effected by means of a small flexible hose, just as one would use a domestic vacuum cleaner.

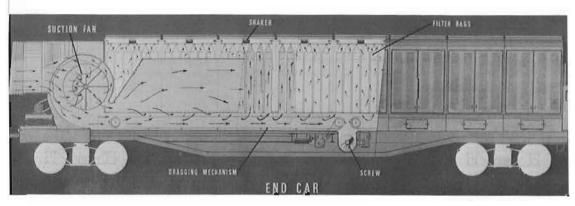
Fire is a potential hazard, and for this reason, a complete carbon dioxide fire-extinguishing system is installed on the train. Outlet heads are strategically located in settling chambers, fan chambers, dust collectors and throughout the ductwork. Sections can be isolated by automatic dampers. Fire detection is by thermostats in all areas susceptible to fire, and when triggered, CO2 is automatically released through discharge nozzles.

The vacuum cleaning train was built and equipped in the Métro shops by an outside contractor, under the supervision of M.T. C. engineers. The centre car was built new, but two of the trailer flat cars (Nos. 82-4509 and 82-4510) were used to construct the end cars. These flats were completely equipped with train-line airbrake and electrical systems. The train runs on the steel rails, but is unpowered.

A speed of 2 to 8 MPH gives the best results. For moving the train at this low speed, two of the pneumatic tyred electric work cars (Nos. 83-4604 and 83-4605) were fitted with special resistors to permit continuous slow operation without damage. One of these is coupled on each end to provide two-way operation, - both working in unison under multiple-unit control. Therefore, the complete train while in operation consists of five cars.

The exterior of the train is finished in gray and dark blue, with a small City of Montreal crest on the centre car. The 3-car vacuum cleaning set bears the number 82-4514.

As mentioned earlier, vacuum cleaning operations are confined to about two hours at night. Even in this short time, about six stations and the tunnels between can be covered.



Note: Much of the information in this article was obtained from a paper delivered at the American Transit Association Rail Transit Group Conference held in Montreal April 3-6, 1967, by Mr. Roger Choquette, Eng., of the M.T.C. Plant and Engineering Department, to whom the writer is indebted.



by Derek Booth

CN is investigating the possibility of reducing its transcontinental passenger service in favour of an improved inter-city service across Canada. The present transcontinental service does not meet the needs of inter-city transportation and studies presently underway may lead to the operation of only one transcontinental train per day with increased inter-city service. However, the existing service will not be altered for at least two years.

A group of 350 Valleyfield residents have signed a petition to Transport Minister Jack Pickersgill asking that passenger service on the New York Central's line into Montreal, which was dropped ten years ago, be restored. Their feeling is that the population of the region has grown sufficiently in recent years to support a commuter service to Montreal with stops at St. Timothée, Beauharnois, Chateauguay Heights and Montreal West and that existing public transportation facilities to the centre of Montreal are inadequate.

As a result of unexpected increases in cost estimates the Federal government may drop the railway feature of the projected causeway linking Prince Edward Island and New Brunswick.

On June 23 CN inaugurated the Expo Extra, a new train service from Montreal to Toronto, leaving Montreal at 1745 hours daily except Saturday. Only stop on the service to Toronto is at the new CN Guildwood station near Toronto and on the Montreal bound train at Dorval.

Garbage and trash from urban areas may provide U.S. railways with a new source of revenue. The NYC and the American Public Works Association are investigating the possibilities of using railways to haul refuse from urban areas to remote rural dumps or to areas where it might be used as land-fill.

The Federal government is reported to be ready to consider new development railways into the Yukon and North-west Territories possibly in the Central Yukon and MacKenzie Valley areas.

Deliveries: up to June 22, 1967.

3240 was delivered on May 24, 1967, serial number M-3427-19.

C.N. rentals from D.M.& I.R.

D.M.& I.R	Received	ъу	C.N.at	Proctor,	Minn.
143 149 152 154 155 156 157	June June June June Apr. June June	12 12 12 28	3		
158	Apr.	28	3		

All are assigned to Symington Yard, near Winnipeg, Man.

Retirements: up to May 31, 1967.

#4 was sold to the Steel Company of Canada for use in Edmonton. Mr. W. Brow reports sighting the unit at Plant #1. The locomotive was delivered to CN on October 10, 1956, is class ER-4b, was built by GE with a 400 HP caterpillar engine, and was retired on the Mountain Region on May 11, 1967.

Locomotive Transfers: up to May 31, 1967.

ROAD NUMBER	TRANSFERRED FROM	TRANSFERRED TO	DATE
3100 - 3109	Great Lakes Rgn	St.Lawrence Rgn	18/5/67
3120 - 3129	Great Lakes Rgn	St.Lawrence Rgn	18/5/67
3655 - 3670	St.Lawrence Rgn	Atlantic Rgn	18/5/67
3845 - 3849	St.Lawrence Rgn	Atlantic Rgn	18/5/67
4126 - 4133	Prairie Rgn	Great Lakes Rgn	18/5/67
4147 - 4156	Prairie Rgn	Great Lakes Rgn	18/5/67
4330 - 4339	St.Lawrence Rgn	Mountain Rgn	18/5/67
4400 - 4404	St.Lawrence Rgn	Mountain Rgn	18/5/67
4451 - 4463	St.Lawrence Rgn	Prairie Rgn	18/5/67
4466 - 4470	St.Lawrence Rgn	Prairie Rgn	18/5/67
6500 - 6504	St.Lawrence Rgn	Prairie Rgn	18/5/67
6505 - 6508	St.Lawrence Rgn	Prairie Rgn	30/5/67
6510	St.Lawrence Rgn	Prairie Rgn	30/5/67
6600 - 6604	St.Lawrence Rgn	Prairie Rgn	18/5/67
6605 - 6607	St.Lawrence Rgm	Prairie Rgn	30/5/67
6609 - 6610	St.Lawrence Rgm	Prairie Rgn	30/5/67
D-104	Great Lakes Rgn	St.Lawrence Rgn	17/4/67
D-116	Great Lakes Rgn	St.Lawrence Rgn	12/5/67
D-118	Great Lakes Rgn	St.Lawrence Rgn	1/5/67
D-204	St.Lawrence Rgn	Great Lakes Rgn	
D-350	St.Lawrence Rgn	Great Lakes Rgn	12/5/67
D-453	Mountain Rgn	Atlantic Rgn	1/5/67
D-500	Atlantic Rgn	St.Lawrence Rgn	1/5/67
D-506	Mountain Rgn	St.Lawrence Rgn	1/5/67

(Information courtesy Charles E. De Jean).

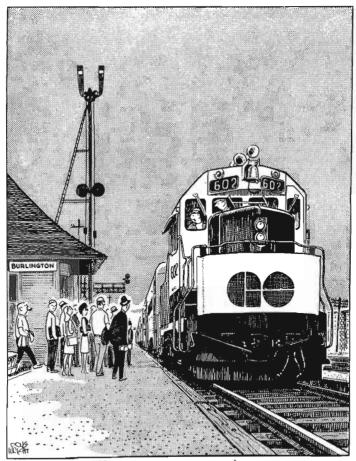


Indian State Railways: up to June 22, 1967.

The road numbers of the last two units are 6197 and 6198.

Spruce Falls Power and Paper: up to June 22, 1967.

The road number of SFP&P's new unit will be #108.



"More passengers every morning . . this place will be like a Toronto suburb vet!"

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